

AEROMEDICAL TECHNICAL BULLETIN

#6- Aeromedical Graded Exercise Test

Revised December 2001

1. The indications for the Aeromedical Graded Exercise Test (AGXT), also called graded exercise treadmill (GXT), are described in AR 40-501, Standards of Medical Fitness, paragraph 4-15, August 1995, and APLs on Abnormal Cardiovascular Testing and the Cardiovascular Screening Program. The guidelines for performing an aeromedical GXT are outlined below to apply a uniform standard in the performance and interpretation of this test on aircrew members.

2. Prior to the AGXT, the aircrew member should be briefed by the local flight surgeon as to the indications for the test, the procedure, and the significance of the results. The patient should sign an informed consent statement.

3. The following conditions should be assured prior to testing:

- a. Minimum of four hours fasting prior to test.
- b. No tobacco or caffeine products one hour prior to test.

4. The aeromedical GXT must be a maximal effort, limited only by symptoms, exhaustion or objective signs (medically significant ectopy, dysrhythmia, or blood pressure response). Exercise should not be halted on attainment of a predicted maximal heart rate.

5. A final report of the AGXT including patient's activity level and attained workload should be forwarded along with the FDME and /or AMS to CDR, USAAMC, ATTN: MCXY-AER, Fort Rucker, AL 36362-5333, for review and disposition. Actual tracings do not need to be sent and if required will be requested by USAAMA.

6. A copy of Aeromedical Graded Exercise Test Report Form (enclosure 1) and Letter to the Attending Physician (enclosure 2) of this ATB should be forwarded with the patient to the attending physician conducting the AGXT.

7. Aeromedical standards for interpretation of treadmill exercise tests in Army aircrew members.

- a. Baseline: The location of three consecutive coplanar ST segments, measured 80 milliseconds after the "J" junction, following 30 seconds of standing hyperventilation. This baseline may be on, above, or below the PQ segment, but must be parallel to it.

b. Abnormal: 1.0 or more millimeters of ST depression in three (3) consecutive coplanar complexes, measured 80 milliseconds after the "J" junction, irrespective of slope. If abnormal, apply follow-up guidelines from the Abnormal Cardiac Function Testing APL (revised November 2001).